

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

|                              |   |                          |
|------------------------------|---|--------------------------|
| <b>PROFOOT INC.,</b>         | ) |                          |
|                              | ) |                          |
| <b>Plaintiff,</b>            | ) | <b>11 C 9004</b>         |
|                              | ) |                          |
| <b>v.</b>                    | ) | <b>Judge John Z. Lee</b> |
|                              | ) |                          |
| <b>MERCK &amp; CO., INC.</b> | ) |                          |
|                              | ) |                          |
| <b>Defendant</b>             | ) |                          |

**MEMORANDUM OPINION AND ORDER**

Plaintiff Eric Ward (“Ward”) has sued Defendant Merck, Inc. (“Merck”) alleging infringement of U.S. Patent No. 6,845,568 (the “’568 Patent”). The allegedly infringing activities concern Dr. Scholl’s Custom Fit Orthotic Centers and Custom Fit Orthotic Inserts, which are manufactured, marketed, and sold by Merck. 3d Am. Compl. ¶¶ 50, 51, 54; Def.’s Resp. 3d Am. Compl. ¶ 12. Merck has placed Dr. Scholl’s Custom Fit Orthotic Centers throughout the United States in various retail stores, including Walgreens and Sears. Def.’s Resp. 3d Am. Compl. ¶ 15. The original complaint named only Walgreen Company (“Walgreens”) and Sears Holdings Corporation (“Sears”) as defendants. Compl. ¶¶ 5-6. But Ward later amended the complaint to include Merck and then voluntarily dismissed the suits against Walgreens and Sears. 1st Am. Compl. ¶ 5; dkt. 28, 29. Subsequently, ProFoot, Inc. (“ProFoot”) purchased the patent-in-suit from Ward, including the right to sue for past, present, and future infringement. 3d Am. Compl. ¶ 2. The parties now ask the Court to construe six terms that appear in the ’568 Patent.

## **I. Background**

The patent-in-suit relates to a method for measuring and correcting the pronation of a person's foot. *See* '568 Patent col.1 ll.17-18, Joint Appendix ("J.A.") 93. The method utilizes a device called a "neutralizer" in the following manner. First, an individual places one foot on the device while keeping another foot off of it. *Id.* at col.5 ll.11-13, col.6 ll.3-5, J.A. 95. Then, the "neutralizer" is used to determine "the angle necessary to place the [right or left] ankle in a neutral position." *Id.* at col.5 ll.14-15, col.6 ll.6-7, J.A. 95. Finally, an individual is provided with "an insert having an angle which represents the neutral state for the [right or left] ankle." *Id.* at col.6 ll.1-2, 8-9, J.A. 95. This method enables the individual to correct any pronation by obtaining a foot insert that may be used in "ski boots, skates, bike shoes and the like." *Id.* at col.1 ll.9-12, J.A. 93.

On September 22, 2000, Ward filed U.S. App. No. 09/667,998, the parent application of the patent-in-suit. It disclosed a system and a method for measuring foot pronation and correcting it by using a foot insert. U.S. App. No. 09/667,998, J.A. 27. On May 20, 2003, the application issued as U.S. Pat. No. 6,564,465 (the "'465 Patent") with a claim that covered only a system for creating a foot insert. '465 Patent, J.A. 11. This patent is not asserted in the present case.

On March 14, 2003, Eric Ward filed U.S. App. No. 10/389,435 as a continuation-in-part of U.S. App. No. 09/667,998. U.S. App. No. 10/389,435, J.A. 96. This second application claimed only a method of fitting an individual with the foot inserts. *Id.* at 113-14. It issued as the '568 Patent—the patent asserted in this case.

To furnish foot inserts to its customers, Merck developed special kiosks, called Dr. Scholl's Custom Fit Orthotic Centers. Def.'s Resp. 3d Am. Compl. ¶ 13. These kiosks, located

in various retail stores in the United States including Walgreens and Sears, contain a pressure-measuring device. *Id.* ¶¶ 15, 19. This device allows customers to analyze their feet, so that they can use these measurements to choose one of the off-the-shelf Dr. Scholl's Custom Fit Orthotic Inserts. *Id.* ¶¶ 19, 22.

The following terms of the '568 Patent are in dispute: (1) neutralizer; (2) neutral position; (3) using the neutralizer to determine the angle necessary to place the <right or left> ankle in a neutral position; (4) providing an insert having an angle which represents the neutral state for the <right or left> ankle; (5) creating a <right or left> foot insert; and (6) predetermined inserts.

## **II. Legal Standard**

Claim construction is a question of law to be decided by a judge. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 391 (1996). Words “are generally given their ordinary and customary meaning.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). A person of ordinary skill in the art is assumed to read the claim term in the context of the entire patent. *Id.*

The Court's analysis begins with the intrinsic evidence, which consists of the patent itself (including claims, specification, and Abstract) and the prosecution history. *Vitronics*, 90 F.3d at 1582 (“in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history”); *Hill–Rom Co. v. Kinetic Concepts, Inc.*, 209 F.3d 1337, 1341 n.1 (Fed. Cir. 2000) (courts “have frequently looked to the abstract to determine the scope of the invention”). The specification is usually “dispositive; it is the single best guide to the meaning of a disputed

term.” *Vitronics*, 90 F.3d at 1582. Claim terms are given “the meaning and scope with which they are used in the specification and the prosecution history.” *Kinik Co. v. ITC*, 362 F.3d 1359, 1365 (Fed. Cir. 2004). But a particular embodiment described in the specification should not be read into the claim when claim language is broader than the embodiment. *Superglide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). That said, a claim may be limited to its preferred embodiment if permitting expansive claim language would undermine the public notice requirements of 35 U.S.C. § 112. *LizardTech, Inc. v. Earth Res. Mapping, Inc.*, 424 F.3d 1336, 1346 (Fed. Cir. 2005).

Furthermore, the context in which a term appears in a claim is also instructive. *Phillips*, 415 F.3d at 1314. Likewise, other claims are “valuable sources of enlightenment as to the meaning of a claim term.” *Id.* Under the doctrine of claim differentiation, “each claim in a patent is presumptively different in scope.” *RF Del., Inc. v. Pac. Keystone Techs., Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003). “That presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim.” *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007). Claim differentiation, however, is a “rule of thumb” and not absolute — it does not trump “the clear import of the specification” or the disclaimer of the subject matter in the prosecution history. *See Edwards Lifesciences LLC v. Cook, Inc.*, 582 F.3d 1322, 1332 (Fed. Cir. 2009); *Fantasy Sports Props., Inc. v. Sportsline.com, Inc.*, 287 F.3d 1108, 1116 (Fed. Cir. 2002).

In addition, “the prosecution history can often inform the meaning of the claim language.” *Phillips*, 415 F.3d at 1317 (Fed. Cir. 2005). For example, it may be used “as support for the construction already discerned from the claim language and confirmed by the written description.” *800 Adept, Inc. v. Murex Sec., Ltd.*, 539 F.3d 1354, 1365 (Fed. Cir. 2008). And

Courts can consult not only the asserted patent's prosecution history, but also the prosecution history of other patents from the same family. *See Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1375 (Fed. Cir. 2013); *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1314 (Fed. Cir. 2007). Moreover, the prosecution history may serve to “exclude any interpretation that was disclaimed during prosecution.” *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005). However, a claim should not be narrowed “simply by pointing to the preferred embodiment or other structures or steps disclosed in the specification or prosecution history.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

Finally, extrinsic evidence, such as dictionaries and expert testimony, may be used if the intrinsic evidence alone is insufficient to determine the meaning of the claim terms. *Vitronics*, 90 F.3d at 1583.

### **III. Analysis**

#### **A. “Neutralizer”**

The parties first disagree on the meaning of the term “neutralizer” used in Claim 1 of the '568 Patent. Merck suggests that “neutralizer” is “a device that includes an angularly adjustable plate and a protractor which are used to measure the angle of adjustment to achieve the neutral position of a specific individual's ankle.” Def.'s Reply Br. Claim Construction 1-2 (“Def.'s Reply”). ProFoot argues that this term should be given its plain and ordinary meaning or, if the Court determines that this term needs further construction, that the term be construed as a “balance measuring device.” Pl.'s Resp. Claim Construction 5 (“Pl.'s Br.”).

The '568 Patent makes it clear that “neutralizer” does not measure all types of balances. The Summary of the Invention explains that there are several types of balances and that the invention deals only with the dynamic one:

This is the difference between what the present invention achieves and what many others do in this field. All other alignment processes implement a two-footed stance to determine the position of neutrality. . . . If a person is standing on two feet, . . . the person may be maintaining balance equally in all six quadrants or in one of the six quadrants and using two others to maintain a steady or “static” balance.

If you reduce the base of support to only one foot, you have a three-sided base which needs to articulate to maintain balance or balance dynamically. The present invention achieves this state by first analyzing the ankle joint to determine correct foot alignment.

’568 Patent col.2 ll.3-19, J.A. 93. Furthermore, Claim 1 itself provides that “the individual place[s] the right foot on a neutralizer while elevating the left foot off of the neutralizer.” *Id.* at col.5 ll.11-13, J.A. 95. Therefore, a “neutralizer” only deals with one-footed “dynamic” balance.

Next, “neutralizer” is not just any “balance measuring device” as ProFoot contends. It has specific functions: to accommodate a single foot and to determine the angle necessary to place the ankle in a neutral position. This is apparent from Claim 1, which covers a method comprising the steps of “having the individual *place the right foot on a neutralizer* while elevating the left foot off of the neutralizer” and “*using the neutralizer to determine the angle necessary to place the right ankle in a neutral position.*” *Id.* at col.5 ll.11-15, J.A. 95 (emphasis added). Likewise, the Abstract states that “[t]he *neutralizer is adapted to accommodate a single foot* of the individual *to determine the neutral angle* for each foot individually.” *Id.* at Abstract, J.A. 89 (emphasis added). The Description of the Preferred Embodiments also explains that in order “[t]o determine a neutral position, *one foot at a time* is measured” while “the person *stands* on [the] foot neutralizer.” *Id.* at col.4 ll.5-9, J.A. 94 (emphasis added).

Finally, the “neutralizer” accomplishes its functions by specific structural elements—a housing, an angularly adjustable plate capable of supporting the foot, and a protractor. Thus, the Abstract of the ’568 Patent plainly states that “[t]he neutralizer has a housing, protractor, and an

angularly adjustable plate capable of supporting the foot.” *Id.* at Abstract, J.A. 89. Nothing in the specification contradicts this definition. In fact, all embodiments of a “neutralizer” have these structural elements. *Id.* at col.3, ll.1-15, J.A. 94.

Such a construction also is supported by the prosecution history of the ’568 Patent’s parent ’465 Patent. *See Biovail Corp. v. Andrx Pharms., Inc.*, 239 F.3d 1297, 1301 (Fed. Cir. 2001) (considering prosecution history of parent patent in claim construction). The amended Claim 1 of the parent application contained the term “neutralizer,” which was described as “having a housing, protractor, an angularly adjustable plate capable of supporting a foot” and “adapted to accommodate a single foot of the individual to determine the neutral angle for each foot of the individual separately.” J.A. 74. This term was used consistently throughout the prosecution history. The inventor had the opportunity to indicate that the term “neutralizer” as it appears in the ’568 Patent was somehow different from the term as it was used in the parent patent, but did not do so.

Of course, “the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim can be a difficult one to apply in practice.” *Phillips*, 415 F.3d at 1323. ProFoot argues that the ’568 Patent’s specification supports a broader construction of a “neutralizer” and that reading the term as having specific structural features improperly limits the claim language to the preferred embodiment. Pl.’s Br. 8, 11. ProFoot points to the Summary of the Invention, which describes “a device and method that measures and then corrects the pronation of the foot” and discusses the method of analyzing the ankle joint to achieve balance. *Id.* 8. It also argues that the Description of the Preferred Embodiments depicts only exemplary measuring devices as the

introduction to the section specifies, pointing to the language in the patent that [f]uture and present alternatives and modifications are contemplated.” *Id.* 9.

But claim terms should be read in the context of the *entire patent*. *Phillips*, 415 F.3d at 1313. And here, the ’568 Patent as a whole makes it clear that a “neutralizer” is not simply a “balance measuring device.” The device deals only with dynamic balance; it can accommodate a single foot and determine the angle necessary to place an ankle in a neutral position. ’568 Patent col.2 ll.3-19, J.A. 93; col.5 ll.11-15, J.A. 95; Abstract, J.A. 89. Moreover, it is described as having a housing, a protractor, and an angularly adjustable plate capable of supporting the foot not only in the Description of the Preferred Embodiments, but also in the Abstract and in the parent patent application. *Id.* at Abstract, J.A. 89; J.A. 74. In the face of such intrinsic evidence, the boilerplate language cited by ProFoot carries little weight. *See Wireless Agents LLC v. Sony Ericsson Mobil Communs. AB*, 189 F. App’x 965, 967 (Fed. Cir. 2006); *IP Innovation, LLC v. Ecollege.com*, 156 F. App’x 317, 321-22 (Fed. Cir. 2005).

Compared to ProFoot’s proposed construction, Merck’s proposal comes closer to the description above, but does not mention “a housing” and adds the phrase “which are used to measure the angle of adjustment to achieve the neutral position of a specific individual’s ankle.” Def.’s Reply 1-2 (stating that “neutralizer” is “a device that includes an angularly adjustable plate and a protractor which are used to measure the angle of adjustment to achieve the neutral position of a specific individual’s ankle”). Merck admits that “the definition previously expressed by the inventor is narrower than the definition [] proposed by Merck.” *Id.* 13. However, it gives no explanation why the definition should not include “a housing,” a structural element listed in the description of a “neutralizer” in the intrinsic evidence. ’568 Patent Abstract, J.A. 89; J.A. 74. Next, incorporating the phrase “which are used to measure the angle of



adjustment to achieve the neutral position of a specific individual's ankle" in the definition would result in repetitive language in Claim 1: "using a device that includes an angularly adjustable plate and a protractor *which are used to measure the angle of adjustment to achieve the neutral position* of a specific individual's ankle *to determine the angle necessary to place the right ankle in a neutral position.*" See '568 Patent col.5 ll.14-15, J.A. 95. Hence, this phrase should not be included in the definition.

For these reasons, the Court will construe "neutralizer" to mean "a device that has a housing, a protractor, and an angularly adjustable plate capable of supporting the foot."

## **B. "Neutral position"**

The Court next construes the term "neutral position." Merck proposes that "neutral position" used in Claim 1 means "a state or position in which the tendons by the individual's ankle are in a relaxed state or are working equally." Def.'s Reply 2. ProFoot counters that the term should be given its plain and ordinary meaning, which is "balanced position." Pl.'s Br. 5.

ProFoot's proposed construction suffers from several deficiencies. First, the '568 Patent's Summary of the Invention reveals that there are several types of balances and balanced positions. '568 Patent col.2 ll.3-19, J.A. 93. But the invention concerns only a "dynamic" balance that is achieved by standing on one foot. *Id.* In fact, Claim 1 itself states that "neutral position" is determined when individual places one foot on the neutralizer and elevates another foot off of the neutralizer. *Id.* at col.5 ll.11-13, col. 6 ll.3-5, J.A. 95.

Next, "neutral position" corresponds to a specific ankle position or, to be precise, to a particular subtalar joint<sup>1</sup> position, *i.e.*, the position between pronation and supination. Claim 1

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<sup>1</sup> A subtalar joint is a joint that allows a foot to move from the orientation where the big toe is over the smaller toes (called pronation) to the orientation where the smaller toes are over the big toe (called supination). See '568 Patent col.1 ll.12-15, J.A. 93 ("the present invention concerns a device and method that produces an insert or foot support that positions the ankle joint or sub taylor [sic: subtalar] joint in a

itself states that there is a particular angle that is “necessary to place the right *ankle* in a neutral position.” *Id.* at col.5 ll.14-15, J.A. 95 (emphasis added). Furthermore, the Background of Invention explains that “the present invention concerns a device and method that produces an insert or foot support that positions *the ankle joint or sub taylor* [sic: subtalar] *joint in a relaxed position by correcting the pronation of the foot.*” *Id.* at col.1 ll.12-15, J.A. 93 (emphasis added). Likewise, the Summary of the Invention discloses that “[t]his invention provides a device and method that measures and then corrects *pronation* of the foot.” *Id.* at col.1 ll.17-18, J.A. 93 (emphasis added). It further elaborates that “[u]nderstanding the demands of skiing specifically was the thrust behind the invention. . . . If the *sub taylor* [sic] *joint* is predisposed with nonfunctional tension, the ability to move freely will be jeopardized.” *Id.* at col.1 ll.40-48, J.A. 93 (emphasis added). And, it also points out that “[t]o achieve the proper pronation of the *sub taylor* [sic] *joint*, how the foot is designed to support weight, and walk must be understood.” *Id.* at col.1 ll.52-54, J.A. 93 (emphasis added). The discussion of the “dynamic” balance in the Summary of the Invention is also instructive: “[t]he present invention achieves this state by first *analyzing the ankle joint* to determine correct foot alignment.” *Id.* col.2 ll.17-19, J.A. 93 (emphasis added).

Moreover, the prosecution history reveals the importance of the position of the subtalar joint. The ’568 Patent specification is almost identical to the specification of its parent application, but it contains an important difference; in the ’568 Patent specification, the term “sub taylor [sic] joint” was added to or replaced the phrase “ankle joint,” indicating that the

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relaxed position by correcting the pronation of the foot”); col.4 ll.21-27, J.A. 94 (“To achieve a neutral position, the operator visually examines the tendons by the ankle until they are in a relaxed state or are working equally. This commonly occurs with no more than two degrees of adjustment of pronation—with the big toe of the foot over the smaller toes . . . . However, supination, orientation with smaller toes over the big toe, may also occur.”).

inventor wished to describe the relevant joint with greater specificity. *Compare id.* at col.1 ll.14, 46, 52, J.A. 93, *with* U.S. Patent No. 6,564,465 col.1 ll.11, 44, 50, J.A. 9.

Merck's proposed definition ("a state or position in which the tendons by the individual's ankle are in a relaxed state or are working equally") comes from the Description of the Preferred Embodiments, which states that "neutral position" is achieved when "the tendons by the ankle . . . are in a relaxed state or are working equally." '568 Patent col.4 ll.21-23, J.A. 94. But the Patent clarifies that "[t]his commonly occurs with no more than two degrees of adjustment of *pronation*. . . . However, *supination* . . . may also occur." *Id.* at col.4 ll.23-27, J.A. 94 (emphasis added). The relaxed state thus comes from the lack of pronation or supination. Add to this the Summary of the Invention, which explains the cause of the tension (*i.e.*, the unrelaxed state) in the system:

If the *sub taylor* [sic] *joint* is predisposed with nonfunctional tension, the ability to move freely will be jeopardized. The fine muscular movements of the foot and ankle dictate the degree of success in the rest of the biomechanical chain. This is, to a large extent, the *cause of tension* or an imbalanced interaction in the chain.

*Id.* at col.1 ll.46-51, J.A. 93 (emphasis added). Therefore, the language in the Description of the Preferred Embodiments that Merck uses for its construction provides further support for the notion that the "neutral position" corresponds to a subtalar joint position that is between pronation and supination. In contrast, Merck's definition draws from the single description of the embodiment and not from the totality of the intrinsic evidence.

Accordingly, the Court will construe the term "neutral position" to mean "a position in which subtalar joint is in the relaxed position due to the lack of pronation or supination."

**C. “Using the neutralizer to determine the angle necessary to place the <right or left> ankle in a neutral position”**

The next phrase to be construed, “using the neutralizer to determine the angle necessary to place the <right or left> ankle in a neutral position,” appears in Claim 1 of the ’568 Patent. Merck asserts that the correct interpretation of the phrase is “using neutralizer by: (1) visually examining and adjusting the individual’s <right or left> ankle to neutral position, and (2) measuring the angular degree of pronation or supination when that ankle is in the neutral position.” Def.’s Reply 2. ProFoot counters that this phrase should be given its plain and ordinary meaning, that the only term at issue after accepting the construction of “neutralizer” and “neutral position” is “angle necessary,” and that the term “angle necessary” needs no independent construction. Pl.’s Br. 6.

Merck’s construction seeks to limit the claims to the preferred embodiment. Its definition is based on the Description of the Preferred Embodiments, the only place in the patent where the visual examination is mentioned. ’568 Patent col.4 ll.21-23, J.A. 94. There is no other indication in the patent that the use of a “neutralizer” must involve visual inspection. On the contrary, the ’568 Patent cites U.S. Patent No. 5,979,067, which describes another method to determine neutral position of a subtalar joint—palpation of the talus head. U.S. Patent No. 5,979,067 col.1 ll.21-28.<sup>2</sup> This intrinsic evidence indicates that a person of ordinary skill in the art would recognize that visual inspection alone is not the only means to determine the neutral position of the ankle joint. *See Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1231 (Fed. Cir. 2011) (stating that the prior art cited in a patent or the prosecution history constitutes intrinsic evidence).

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<sup>2</sup> Although the parties did not include this patent in the Joint Appendix, the Court may take judicial notice of published patents under Fed. R. Evid. 201(b) & (c). *See Pepitone v. Am. Standard, Inc.*, No. 92-1284, 1992 WL 336539, at \*3, n.1 (Fed. Cir. Nov. 17, 1992).

Applying the Court’s definitions of “neutralizer” and “neutral position,” the phrase at issue becomes “using a device that has a housing, a protractor, and an angularly adjustable plate capable of supporting the foot to determine the angle necessary to place the <right or left> ankle in a position in which subtalar joint is in the relaxed position due to the lack of pronation or supination.” There is no need to define the words “angle necessary.” The two words as they appear in the Patent are easily understood and do not require interpretation. In context, they mean the angle measured by the protractor after the angularly adjustable plate is turned to place the subtalar joint in the relaxed position. *See, e.g.*, ’568 Patent, col.4 ll.21-29, 39-40, J.A. 94 (discussing adjusting the plate to achieve a “neutral position” and measuring the corresponding angle by the protractor).

**D. “Providing an insert having an angle which represents the neutral state for the <right or left> ankle”**

Merck next suggests that the phrase “providing an insert having an angle which represents the neutral state for the <right or left> ankle” used in Claim 1 should be interpreted as “providing an insert that reflects the measured angular degree of pronation or supination of the individual’s <right or left> foot that establishes the neutral position.” Def.’s Reply 2. ProFoot replies that the phrase does not require further construction beyond its plain and ordinary meaning. Pl.’s Br. 6.

This phrase uses the term “neutral state” instead of “neutral position.” The Description of the Preferred Embodiments connects the two terms. It explains that the neutralizer’s plate is angularly adjusted “to achieve a *neutral position*” and the corresponding angle is then transferred to the “bed,” which is then “placed inside a piece of sports equipment such as ski boot” to hold the foot “at the angle which is the *neutral state* for the ankle.” ’568 Patent col.4 ll.4-58, J.A. 94

(emphasis added). Thus, the ankle is at the same angle on the neutralizer's plate and on the "bed," and, hence, "neutral state" and "neutral position" signify the same position of the ankle.

Therefore, the Court replaces the term "neutral state" with the definition of "neutral position," and the phrase "providing an insert having an angle which represents the neutral state for the <right or left> ankle" becomes "providing an insert having an angle, which represents the position in which the subtalar joint is in the relaxed position due to the lack of pronation or supination, for the <right or left> ankle," which is similar to the Merck's construction. This phrase is easily understood. Again, the Court agrees with ProFoot that the term needs no further construction.

#### **E. "Predetermined inserts"**

Before construing the last disputed term of the independent Claim 1 ("creating a <right or left> foot insert"), the Court must first examine the term "predetermined inserts" that appears in dependent Claim 3. Merck argues that the term means "inserts that are pre-made with the previously measured angle that establishes the neutral position for the individual's <left or right> foot." Def.'s Reply 3. ProFoot again counters that the term needs no further construction beyond its plain and ordinary meaning. Pl.'s Br. 6.

The key concept in the Merck's construction is that the fabrication of inserts "is based on individualized measurement of the individual's foot and ankle." Def.'s Reply 10. But "[t]hose measurements can be stored and used to create an individualized insert at any time," so "fabrication of inserts can occur at any time." *Id.* Although it is certainly imaginable that one can save an individual's measurements to use it later to manufacture an insert, there is nothing in the intrinsic evidence to suggest this route. Instead, the '568 Patent's specification describes inserts that are pre-made without using a particular individual's measurements: "the inserts []

may be pre-made with a range of predetermined angles. For example, insert [] may have an angle that ranges from ½ a degree to 3 degrees . . . in ½ degree increments. This reduces the turn-around time to complete the process.” ’568 Patent col.4 ll.61-65, J.A. 94. Merck’s proposed definition thus ignores important intrinsic evidence. Furthermore, Claim 3 itself states that the “insert is provided to a user by selecting said insert from a *plurality* of predetermined inserts.” *Id.* at col.6 ll.12-14, J.A. 95 (emphasis added). Under Merck’s definition, the insert would have to be chosen from the plurality of the *same* inserts made using individual’s measurement. This would be a nonsensical result.

Overall, the Court agrees with ProFoot that “predetermined inserts” is an easily understandable term and does not require further construction beyond its plain and ordinary meaning.

**F. “Creating a <right or left> foot insert”**

Finally, the term “creating a <right or left> foot insert” appears in Claim 1 of the ’568 Patent. Merck reads this term to mean “fabricating a foot insert based on an operator’s measurements of the individual’s <right or left> foot.” Def.’s Reply 2. ProFoot replies that the term needs no further construction beyond its plain and ordinary meaning or, in alternative, that “creating” should be construed as “determining a right or left insert.” Pl.’s Br. 6.

Merck’s construction hinges on the idea that the insert is made using individualized measurements. Def.’s Reply 10. Specifically, Merck points out that in Claim 1 “the three sub-steps that follow the term[] . . . indicate that inserts are to be fabricated to have an angle that represents the neutral position.” Def.’s Opening Claim Construction Br. 19. Merck further refers to the specification, which discusses the importance of measuring each foot independently,

evaluating pronation, and positioning the ankle in a relaxed position by correcting the pronation of the foot. *Id.* 20.

As an initial matter, the Court agrees that the phrase “creating a <right or left> foot insert” encompasses fabricating an insert based on the individual’s measurements. But that is not all that the term encompasses. Dependent Claim 3 states that the insert can be “provided to a user by selecting said insert from a plurality of predetermined inserts.” ’568 Patent col.6 ll.12-14, J.A. 95. This means that “creating” must also include a scenario where a “predetermined insert” is provided to a user. This interpretation is further supported by the patent’s specification, which describes both, making an insert using individual’s measurements and pre-making inserts “with a range of predetermined angles.” *Id.* at col.4 ll.28-55, 61-64, J.A. 94.

The plain and ordinary meaning of “create” (*e.g.*, “to cause to come into being”) encompasses both scenarios and is consistent with the entirety of the ’568 Patent, not just the excerpts selected by Merck. *See* Pl.’s Br. 18. (suggesting that “create” broadly means “to cause to come into being”). Therefore, the Court agrees with ProFoot that the term does not require construction.

#### **IV. Terms as Construed**

| #   | <u>Term</u>   | <u>Definition</u>   |
|-----|---|---|
| I   | “Neutralizer”   | “A device that has a housing, a protractor, and an angularly adjustable plate capable of supporting the foot” |
| II  | “Neutral position”  | “A position in which subtalar joint is in the relaxed position due to the lack of pronation or supination”    |
| III | “Using the neutralizer to determine the angle necessary to place the <right or left> ankle in a neutral position” | No construction required once the definitions of the terms “neutralizer” and “neutral position” are applied.  |



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|----|--|--|
| IV | “Providing an insert having an angle which represents the neutral state for the <right or left> ankle” | No construction required once “neutral state” is replaced with the definition of the “neutral position.” |
| V  | “Predetermined inserts”  | No construction required.  |
| VI | “Creating a <right or left> foot insert”   | No construction required.  |

For the foregoing reasons, the six disputed claim terms are construed as set forth in this Memorandum Opinion and Order.

IT IS SO ORDERED.

ENTERED 6/17/15




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John Z. Lee  
United States District Judge